WHAT IS CLAIMED IS:

1. A method of locating a selected type of passive electronic marker; said method comprising:

transmitting a signal at a frequency associated with a selected type of passive electronic marker;

receiving a signal from a marker; and

determining a frequency distribution of the received signal.

2. The method as claimed in claim 1 further comprising:

indicating presence of the selected type of passive electronic marker if, responsive to said determining, the frequency with the greatest amplitude is the frequency associated with the selected type of passive electronic marker.

3. The method as claimed in claim 1 further comprising:

indicating presence of no passive electronic marker if, responsive to said determining, the frequency with the greatest amplitude is not the frequency associated with the selected type of passive electronic marker.

4. The method as claimed in claim 1, wherein said determining comprises performing synchronous detection on a signal received during said receiving.

5. The method as claimed in claim 4, wherein said performing synchronous detection on the received signal comprises:

converting the received signal to a digital signal; and

sequentially processing the digital signal with in-phase and phase-shifted reference frequencies.

6. The method as claimed in claim 1, wherein said determining comprises performing a Fourier Transform on a signal received during said receiving.

7. The method as claimed in claim 1, wherein said determining comprises passing a signal received during said receiving through parallel narrow-band filters.

8. A system for locating a selected type of passive electronic marker; said system comprising:

a transmitter for transmitting a signal at a frequency associated with a selected type of passive electronic marker;

a receiver for receiving a signal from a marker; and,

a processor coupled to the receiver for determining a frequency distribution of the received signal.

9. The system as claimed in claim 8 further comprising:

display means for indicating presence of the selected type of passive electronic marker if a frequency with the greatest amplitude determined by the processor is associated with the selected type of passive electronic marker.

10. The system as claimed in claim 8, wherein said processor includes means for performing synchronous detection on the received signal.

11. The system as claimed in claim 10, wherein said means for performing synchronous detection on the received signal includes a digital signal processor synchronous detector.

12. The system as claimed in claim 8, wherein said processor includes means for performing a Fourier Transform on the received signal.

13. The system as claimed in claim 8, wherein said processor includes parallel narrow-band filters.